Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-26. (Cancelled)

27. (Currently Amended) A method of monitoring gene expression of virally encoded nucleic acid from virus infected cells within an organism, said method comprising:

(a) administering a measles [[Paramyxoviridae]] virus to said organism, wherein said measles [[Paramyxoviridae]] virus comprises a nucleic acid sequence encoding a heterologous polypeptide, wherein said nucleic acid sequence is upstream of a nucleic acid encoding a viral polypeptide, and wherein said heterologous polypeptide is released from infected cells into a biological fluid of said organism when expressed, and

(b) detecting the amount of said heterologous polypeptide in said biological fluid, thereby providing an indication of the amount of said gene expression.

28. (Previously Presented) The method of claim 27, wherein said heterologous polypeptide is biologically inactive in said organism.

29. (Previously Presented) The method of claim 27, wherein the molecular weight of said heterologous polypeptide is below 10 kilodaltons.

30. (Previously Presented) The method of claim 27, wherein said heterologous polypeptide is a tumor antigen.

31. (Previously Presented) The method of claim 27, wherein said heterologous polypeptide is a carcinoembryonic antigen.

32. (Previously Presented) The method of claim 27, wherein said heterologous polypeptide is a beta subunit of human chorionic gonadotrophin.

33. (Previously Presented) The method of claim 27, wherein said nucleic acid sequence encodes a fusion protein, wherein said fusion protein comprises said heterologous polypeptide fused to an endogenous polypeptide.

34. (Previously Presented) The method of claim 33, wherein said endogenous polypeptide is an H protein.

35. (Previously Presented) The method of claim 33, wherein said fusion protein comprises an amino acid linker sequence between said heterologous polypeptide and said endogenous polypeptide, and wherein said amino acid linker sequence comprises a protease cleavage site.

36. (Previously Presented) The method of claim 35, wherein said protease cleavage site is a furin cleavage site.

37. (Currently amended) The method of claim 27, wherein said measles [[Paramyxoviridae]] virus is replication-competent.

Claims 38-42. (Cancelled)

43. (Currently Amended) A measles [[Paramyxoviridae]] virus comprising a nucleic acid sequence encoding a heterologous polypeptide, wherein said measles [[Paramyxoviridae]] virus infects cells of an organism when administered to said organism, wherein said nucleic acid

sequence is upstream of a nucleic acid encoding a viral polypeptide, and wherein said heterologous polypeptide is released from said infected cells into a biological fluid of said organism when expressed, said released heterologous polypeptide being detectable in said biological fluid, and wherein said heterologous polypeptide is biologically inactive in said organism.

44. (Cancelled)

45. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 43, wherein the molecular weight of said heterologous polypeptide is below 10 kilodaltons.

46. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 43, wherein said heterologous polypeptide is a tumor antigen.

47. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 43, wherein said heterologous polypeptide is a carcinoembryonic antigen.

48. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 43, wherein said heterologous polypeptide is a beta subunit of human chorionic gonadotrophin.

49. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 43, wherein said nucleic acid sequence encodes a fusion protein, wherein said fusion protein comprises said heterologous polypeptide fused to an endogenous polypeptide.

50. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 49, wherein said endogenous polypeptide is an H protein.

51. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 49, wherein said fusion protein comprises an amino acid linker sequence between said heterologous polypeptide and said endogenous polypeptide, and wherein said amino acid linker sequence comprises a protease cleavage site.

52. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 51, wherein said protease cleavage site is a furin cleavage site.

53. (Currently Amended) The measles [[Paramyxoviridae]] virus of claim 43, wherein said measles [[Paramyxoviridae]] virus is replication-competent.

Claims 54-58. (Cancelled)